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TITLE: QUARTZ OSCILLATOR UNIT  
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INVENTOR-INFORMATION:

NAME  
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ABSTRACT:

PURPOSE: To keep airtightness sufficiently without degrading the characteristics of a quartz oscillator, by providing a metallic layer consisting of Cr and Au layers on the surface and the reverse of the frame of a tuning fork type quartz oscillator and setting the film thickness of Cr and Au to 1,000 $\pm$ 3,000 $\mu$ m; and  $\geq$ 3,000 $\mu$ m; respectively.

CONSTITUTION: Box-shaped vessels 2a and 2b, which hold a quartz oscillator 1 with frame between them, and sealing solders 3a and 3b which seal them tightly are layered and are heated in a vacuum atmosphere, and sealing solders are melted to seal them tightly. In this case, photoetching technique is adopted for a metallized layer 11a of the frame part of the oscillator 1 and a frame

part 21a of vessels 2a and 2b, and a metallic layer consisting of an Au film having  $\geq 3,000 \text{ \AA}$ ; and a Cr film having  $1,000 \sim 3,000 \text{ \AA}$ ; which is provided as the ground for enhancing the adhesive strength of the Au film is provided as the protection film for this photoetching. Thus, a sufficient airtightness is obtained without degrading the characteristics of the quartz oscillator.

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